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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,250	01/08/2004	Rhonda L. Childress	AUS920030930US1	7961
35525	7590	02/07/2008		
IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380			EXAMINER HUR, ECE	
			ART UNIT 2179	PAPER NUMBER
			NOTIFICATION DATE 02/07/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ptonotifs@yeeiplaw.com

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/753,250	CHILDRESS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	ECE HUR	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 is/are pending in the application..
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/08/2004, 02/06/2006</u> .                                  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This action is responsive to application filed on January 8, 2004 in which Claims 1-43 are presented for examination.

#### ***Status of Claims***

Claims 1-43 are pending in the case. Claims 1, 15, 16 and 30 are the independent Claims.

Claims 1, 15 and 16 are rejected under Double Patenting.

Claims 15-43 are rejected under 35 U.S.C. 101.

Claims 1-43 are rejected under 35 U.S.C. 103(a).

#### ***Specification Objection***

The Specification does not provide the serial number for the cross reference to the related application. Correction is required.

#### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated

by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 15 and 16 of the currently examined application (10/753,250) provisionally rejected on the ground of nonstatutory double patenting over Claims 1, 12, 13 and 14 of copending application (10/753/545). This is a provisional double patenting rejection since the conflicting claims have not yet been patented. Although the conflicting Claims are not identical, they are not patentably distinct from each other because it would have been obvious to one of ordinary skill in the art at the time of the invention. Exemplarity Claims 15 and 13 from both applications is provided in Table 1.

**Table 1**

Current Application: 10/753,250(Claim 15)	Copending Application: 10/753/545 (Claim 13)	
A system for monitoring system	A system for monitoring system	

performance and communicating detailed system performance data via an enhanced graphical user interface, comprising: a graphical user interface;	performance and communicating acceptable parameters of system operation via an enhanced graphical user interface, comprising: a graphical user interface;	
a target-type management vector display within the graphical user interface, wherein the display includes regions representing levels of system performance, a metric point within the display identifying the current status of system performance at a particular point in time.	a target-type management vector display within the graphical user interface, wherein the display includes regions representing levels of system performance, boundaries indicating acceptable system operation parameters, and system performance status markers identifying the status of system performance at a particular point in time.	Displaying the metric point and displaying the boundaries are similar, because Claim 15 displays the boundaries as well while displaying the metric points.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 15 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, specifically directed towards Software program per se. The system does not include structural elements to categorize the Claim statutory, therefore it is directed to software. Software is functional descriptive material

that can be considered statutory only if it is both functional and clearly embodied on a computer readable medium and designed to support specific data manipulation function. When functional descriptive material is recorded on a computer-readable medium it will become structurally and functionally interrelated the medium and will be statutory in most cases since the use of technology permits the function of the descriptive material to be realized. See *In re Lowry*, 32 F.3D 1579, 32 USPQ2d 1031, 1035 (Fed. Cir 1994) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQd at 1759. A Software structure is functional if the specific arrangement of data enables a computer to accomplish useful result arising from the arrangement of the data in the software. However, only computer readable medium executed instruction by a processor could be statutory, it is not clearly defined as being embodied in a computer readable medium as executed instruction and is therefore not statutory. See *Warmerdam*, 33 F.3d at 1360, 31 USPQ2d at 1759.

Claims 16-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims refer to a data processing system and the means that perform the function(FIG. 2 and FIG. 3) include computer readable medium. (Specification, Page 15, Paragraph 3). However, Computer readable medium in the system is defined as "communication media" including radio frequency and light wave transmissions. (PG Pub., Paragraph 0068).

Claims 30-43 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention is directed to computer program product stored in a "computer readable medium", however in the Specification Computer readable medium is defined as "communication media" including radio frequency and light wave transmissions. (PG Pub., Paragraph 0068). Communication media is non-statutory.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-11, 14-26, 29-40 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caccavale, US 5,819,033.

Regarding Claim 1, Caccavale discloses the claimed aspect of a method for monitoring system performance and communicating detailed system performance(Abstract, Fig.12) data via an enhanced graphical representation(Caccavale, Column 4, lines 26-29, FIG. 12), comprising: querying a current monitoring configuration(Abstract); monitoring system performance using instructions obtained from the current monitoring configuration(Caccavale, Column 2, lines 16-19); polling system data according to the current monitoring configuration; and displaying the polled system data on a graphical representation(Caccavale, Column 3, lines 58-66, FIG.12), wherein the graphical representation comprises a target-type management vector display including regions representing levels of system performance(Column 29, lines 6-19, FIG.12), more specifically, wherein the sphere in FIG. 12 is one of region of acceptable performance, while the region external to the cube represents a region of unacceptable performance, and a metric point within the display identifying the current status of system performance at a particular point in time(Caccavale, Column 27, lines 57-63).



Caccavale does teach graphical representation of a target type pattern, however does not teach the graphical user interface aspect. It would be obvious at the time of the invention to illustrate the three dimensional graph(Caccavale, Column 4, lines 26-29) on a graphical user interface because this would allow the user monitor the network more efficiently.

Regarding Claim 2, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. It is inherent in Caccavale's invention that determining whether the polled system data is reportable; selecting a report to display the polled system data(Column 4, lines 26-29, Column 3, lines 54-61), wherein possible workload values plotted; and identifying information in the polled system data to display in the report. (Column 3, 42-61).

Regarding Claim 3, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Caccavale discloses the claimed aspect of the metric point within the target-type management vector display provides the performance status of a particular area of the system at a particular time,(Column 29, lines 6-19, FIG.12), more specifically, wherein the sphere in FIG. 12 is one of region of acceptable performance, while the region external to the cube represents a region of unacceptable performance, and a metric point within the display identifying the current status of

system performance at a particular point in time(Caccavale, Column 27, lines 57-63, Column 2, lines 5-10).

Regarding Claim 4, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Caccavale discloses the claimed aspect of the management vector display provides information regarding results of performance adjustments to the system, wherein acceptable and unacceptable areas are shown. (Column 29, lines 6-19, FIG.12).

Regarding Claim 5, the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Caccavale discloses the claimed aspect of multiple metric points are used in the display to identify a trail of system status information determined at fixed periods of time(Column 2, line 9) in FIG. 12, wherein metric points are illustrated inside the sphere.

Regarding Claim 6 most of the limitations have been met in the rejection of Claim 5. See details for Claim 5 rejection. Caccavale discloses the claimed aspect of the metric trail is used to determine the effect adjustments to system operation have on system performance. (Caccavale, Column 4, lines 24-42, Column 29, lines 6-26).

Regarding Claim 7, most of the limitations have been met in the rejection of Claim 5. See details for Claim 5 rejection. Caccavale discloses the claimed aspect of the distance between consecutive metric points indicates the rate of change of system performance over a fixed period of time, wherein the workload changes over time and workload is plotted to create three dimensional representation. (Caccavale, Column 3, lines 50-66).

Regarding Claim 8, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Caccavale discloses the claimed aspect of the target-type management vector display includes a vertical axis and horizontal axis(FIG.12) representing user-defined attributes. (Caccavale, Column 27, lines 56-63).

Regarding Claim 9, most of the limitations have been met in the rejection of Claim 8. See details for Claim 8 rejection. Caccavale discloses the claimed aspect of the user-defined attributes include transactions over time, wherein monitoring the workload and performance characteristics of the server and altering the server parameters accordingly and the effectiveness of a given change in the sever parameters is reflected in the next set of monitored workload and performance values. (Caccavale, Abstract).

Regarding Claim 10, most of the limitations have been met in the rejection of Claim 8. See details for Claim 8 rejection. Caccavale discloses the claimed aspect of industry baseline metrics are used to set the attributes, wherein the internal server performance characteristics may include, for example, a data cache hit ratio of a data cache in the server. The set of server parameters may include, for example, the overall data cache size or the data cache geometry of the server. (Caccavale, Abstract).

Regarding Claim 11, most of the limitations have been met in the rejection of Claim 8. See details for Claim 8 rejection. Caccavale discloses the claimed aspect of a target operational state of a particular area of the system is a point where the vertical axis and horizontal axis meet on the management vector display. (Caccavale, FIG. 12, sphere with metric points is the acceptable area).

Regarding Claim 14, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Applicant should duly note that it would be obvious to one of ordinary skill in the art at the time of the invention to have more than one of the same representation "multiple target-type management vector displays, each display representing system performance for a different set of variables" depending on the programmer's choice based on the user's need.

Regarding Claims 15 and 16, Caccavale discloses the claimed aspect of a system for dynamically analyzing and improving the performance of a system. The rejection for Claim 1 applies to Claims 15 and 16. See the rejection details for Claim 1.

Regarding Claims 17-26 and 29, most of the limitations have been met in the rejection of Claim 16. See details for Claim 16 rejection. The rejection for Claims 2-11 and 14 apply to Claims 17-26 and 29.

Regarding Claims 30-40 and 43, Caccavale discloses the claimed aspect of computer program product in FIG. 3-FIG. 9, wherein computer program is illustrated. The rejection for Claims 2-11 and 14 apply to Claims 30-40 and 43.

Claims 12-13, 27-28 and 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caccavale, US 5,819,033, in view of Manghirmalani, US 5,819,028.

Regarding Claims 12-13, 27-28 and 41-42 most of the limitations have been met in the rejection of Claims 1, 16 and 30. See rejection details for Claims 1, 16 and 30. Caccavale discloses the claimed aspect of the target-type management vector display comprises two regions, wherein a first region indicates satisfactory performance

(FIG.12, sphere), a second region indicates unacceptable performance (FIG. 12, when sphere intersects the cube is the unacceptable region).

Caccavale does not specifically teach another region "a third region indicates improvement required performance" and regions are displayed using different colors, however Manghirmalani discloses three different region in FIG. 6, L 606, N 607, H 608. The region 606 is shaded in red. (Caccavale, Column 9, lines 38-40). Furthermore in FIG. 12, 1211, 1212, 1213 indicated regions with different colors. (Caccavale, Column 12, lines 34-37).

It would be obvious to one of ordinary skill in the art at the time of invention to combine Caccavale's target vector representation with Manghirmalani's different color region concept because this would allow the user to monitor the system more efficiently.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- 1) Leong et al., US 6,728,219, 04/27/2004, "Graphical user interface system and method for visually gauging network performance".

- 2) Villado et al., US 20040111507, 06/10/2004, "Method and system for monitoring network communications in real-time".
- 3) Anderson et al., US 20040017403, 01/29/2004, "Data view of a Modelling System".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ECE HUR whose telephone number is 571 270-1972. The examiner can normally be reached on MONDAY-THURSDAY 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WEILUN LO can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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January 17, 2007

A handwritten signature in black ink, appearing to read 'Weilun'.

WEILUN LO  
SUPERVISORY PATENT EXAMINER